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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/917,224	07/27/2001	Martin P. Klein	ASX-054C	9211

7590 06/13/2003

Patent Administrator  
Testa, Hurwitz & Thibault, LLP  
High Street Tower  
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Boston, MA 02110

EXAMINER

NGUYEN, KHIEM D

ART UNIT PAPER NUMBER

2823

DATE MAILED: 06/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/917,224

Applicant(s)

KLEIN ET AL.

Examiner

Khiem D Nguyen

Art Unit

2823

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 May 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 15-17 is/are rejected.
- 7) ☒ Claim(s) 13 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____    | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Response to Amendment***

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

A new rejection is made as set forth in this Office Action.

Claims (1-17) are pending in the application.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-12 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Felsenthal et al. (U.S. Patent 6,217,272) in view of Kodama et al. (U.S. Patent 5,269,643).

Felsenthal discloses a method of processing substrates comprising (See col. 3, line 25 to col. 6, line 67 and FIGS. 1-7),

providing a first batch of substrates (FIG. 2, 14) onto a first substrate processing pallet (FIG. 2, 15) (col. 4, lines 50-56 and FIG. 2),

engaging a first transport positioning feature (FIG. 2, 52) of said first substrate pallet with a first transport alignment feature of a first transport mechanism (FIG. 2, 40)

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to particularly position the first substrate processing pallet with respect to the first transport mechanism (col. 5, lines 39-60),

transporting, with the first transport mechanism, the first batch of substrates (FIG. 1, 14) on said first substrate processing pallet (FIG. 1, 16) to a first process chamber (FIG. 1, 26) adapted to perform a first processing operation (col. 4, line 50 to col. 5, line 22), and

performing the first processing operation on the first substrate in the process chamber (col. 6, lines 4-33).

the method further comprising engaging a second transport positioning feature (FIG. 2, 52) to the first substrate pallet (FIG. 2, 15) with a second transport alignment feature of the second transport mechanism (FIG. 2, 44) to particularly position the first substrate processing pallet with respect to the second transport mechanism (col. 5, lines 39-60).

transporting, with a second transport mechanism the first batch of substrates (FIG. 1, 14) on the first substrate processing pallet (FIG. 1, 16) to a second process chamber (FIG. 1, 42) adapted to perform a second processing operation (col. 6, lines 47-54) and performing the second processing operation on the first batch of substrates in the second process chamber and at the same time providing a second batch of substrates onto a second substrate pallet then transporting the second substrate pallet into the first process chamber and performing the first processing operation on the second batch of substrate substantially concurrently with the step of performing the second processing operation on the first batch of substrate (col. 6, line 63 to col. 7, line 5) and the method further

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comprising, providing a third batch of substrates onto a third substrate processing pallet (col. 7, lines 4-5).

In re claim 15, Felsenthal discloses wherein the step of providing a first batch of substrates (FIG. 2, 14) further comprises, providing each of the first batch of substrates into an associated recess (FIG. 2, 54) being adapted to receive one of the first batch of substrate.

In re claims 16 -17, Felsenthal discloses providing a load lock (FIG. 2, 18) adapted for containing the first transport mechanism (FIG. 2, 40) and the first processing pallet (FIG. 2, 15) during the step of providing the first batch of substrates to the first substrate processing pallet, and subsequent to completion of the step of performing the second processing operation, returning the first batch of substrates on the first substrate pallet through the first process chamber to the load lock.

Felsenthal fails to explicitly discloses engaging a first processing alignment feature of the first substrate processing pallet with a first chamber alignment feature located within the first chamber to particularly position the first substrate processing pallet with respect to the first process chamber as recited in present claim 1.

Kodama discloses engaging a first processing alignment feature of the first substrate processing pallet with a first chamber alignment feature located within the first chamber to particularly position the first substrate processing pallet with respect to the first process chamber (col. 3, line 51 to col. 4, line 3). It would have been obvious to one of ordinary skill in the art of making semiconductor devices to combine the teaching of Felsenthal and Kodama to enable the process of engaging a first processing alignment

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feature of the first substrate processing pallet with a first chamber alignment feature located within the first chamber of Felsenthal to be performed and furthermore distances among respective wafers being uniform (col. 3, lines 29-30).

***Allowable Subject Matter***

Claims 13-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khiem D Nguyen whose telephone number is (703) 306-0210. The examiner can normally be reached on Monday-Friday (8:00 AM - 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Olik Chaudhuri can be reached on (703) 306-2794. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-9179 for regular communications and (703) 746-9179 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

K.N.  
June 12, 2003

  
Olik Chaudhuri  
Supervisory Patent Examiner  
Technology Center 2800